

AURIZON LOCOMOTIVE DATASHEET 2170D CLASS



QR's final 16 cylinder heavy haul Clydes were the 2170 class, built in three groups from 1982 to 1984. Virtually identical to the 2150 class, they also featured 'Dash 2' modular electrical cabinets. The first eleven (2170-2180) were built for the German Creek development. They were followed by 2181-2197 (17 locos) for Oaky Creek and Riverside mines, and 2199-2214 (16 locos) for the Blair Athol project. Subsequent to 2214, another loco was added to the Oaky Creek/Riverside pool, 2198, which on entering service on 22/2/84, became the last of the 'low nose' Clydes built for QR. Several of the class were built as Locotrol command locos - 2177 to 2179, 2187 to 2190, 2197 and 2211 to 2214. All were fitted with air conditioning (APAC or Sigma).

After only a short life in Goonyella coal traffic, most moved to the general purpose pool following electrification of this coal system in the late eighties. All units (with the exception of 2202 to 2210) underwent mainline weight reduction (A suffix), followed by Driver Only conversion (D suffix), and addition of auxiliary fuel tanks (F suffix). These mainline units were fitted with ATP (Automatic Train Protection) between June 1992 and June 1993, and were used in Brisbane and the South West, and between Rockhampton and Townsville. Eleven members of the class were fitted with extended cabs between 1995 and 1999, to relieve cramped conditions resulting from the ATP equipment. These were 2170F, 2197F, 2190F, 2176F, 2182F, 2214F, 2212F, 2201F, 2200F, 2211F and 2213F (in order of conversion). These have all now been superseded with 'maxi-cabs', while ATP equipment has been removed off several and placed on 2300 class units.

Meanwhile, 2202 to 2210 (still with full size fuel tanks) were transferred to Townsville in 1988 for Greenvale mineral haulage, and from 1993 worked on the Mount Isa line. They were reallocated to Callemondah for Moura coal traffic in the late nineties.

In 2000, an overhaul program commenced, which included the fitting of larger 'maxi cabs'. The 2202-2210 group was also brought up to the new standard. Most were reverted to the 'D' suffix during this program, although 13 of the 43 have been retained as 'F' types of lower weight. See separate datasheet for these.

Builder : Clyde Engineering at ComEng, Salisbury North QLD, 1982-1984
 Number Built : 45
 Running Numbers as built : 2170-2214
 Number Currently Owned : 30 * excludes 'F' type, see separate datasheet
 Current Running Numbers : 2170, 2171, 2173-2174, 2176-2185, 2188, 2190, 2201-2214
 ATP equipped (8) : 2170, 2176, 2190, 2201, 2211-2214
 Notes : 2175 and 2187 written off following accidents (1989 and 1995), 2181 named P.J.GOLDSTON after a former Commissioner of Railways

'A' conversions : 2170-2201, 2211-2214 7/87-1/91 at Redbank 2172A first, 2213A last
 DOO conversions : 2170-2201 (ex 2175), 2211-2214 9/89-10/92 30 at Redbank, 5 at Rockhampton 2194D first, 2200D last; 2202-2210 at Redbank 11/00-4/04 2208D first, 2203D last

'F' conversions : 2170-2201 (ex 2175), 2211-2214 12/92-4/93 5 at Redbank, 17 at Rockhampton, 13 at Townsville, 2177F first, 2196F last

Gauge : 1067 mm
 Weight : 97.5 tonnes
 Maximum Axleload : 16.25 tonnes
 Maximum Speed : 100 km/h
 Wheel arrangement : Co-Co
 Model : GL26C-2

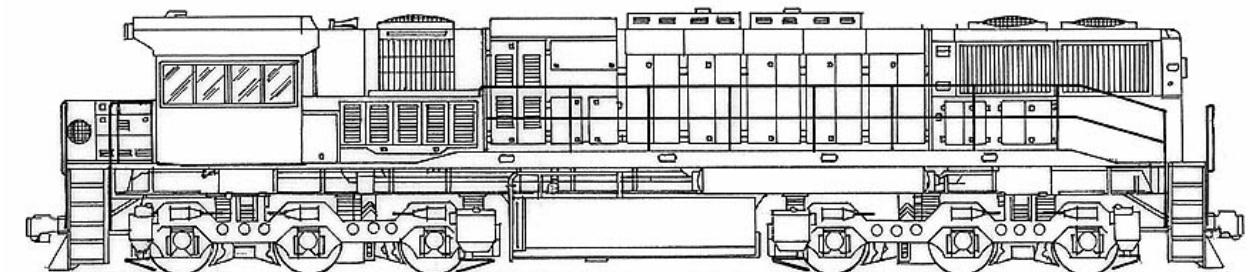
Length over couplers : 18059 mm
 Length over headstocks : 17043 mm
 Pivot centres : 11684 mm
 Wheel centres : 1905 mm
 Wheel diameter : 1016 mm
 Walkway height : 1664 mm
 Height : 3900 mm
 Width : 2771 mm

Engine Type : EMD 16-645E, Rootes Blowers
 Engine Speed : 900/315 rpm (max/min)
 Traction Alternator : AR6
 Nominal Voltage : 600 (DC)
 Companion Alternator : CA5
 Nominal Voltage : 180 (DC)
 Aux. Alternator : A3
 Traction Motor Type and number : EMD D29 (6)
 Gear Ratio : 63:14
 Brake Equipment : Westinghouse 26L
 Air Compressor : Gardner Denver WBO

No. of driving stations : 1 (Right hand side)
 Dynamic Brakes : Yes (Extended Range)
 Fischer Electronic Vigilance System
 Event Recorder : Wabtec TDR9000
 Wheelslip System :
 Clyde Dash 2 2171/74/77/83/2201-11,2214
 ZTR Nexsys II All others
 Toilet : No (Yes for 2208)
 Air Conditioner : ThermAir RD1-1000

Gross Power : 1641 kW
 Tractive Power : 1492 kW
 Continuous Tractive Effort : 213 kN @ 19.8 km/h
 Maximum Dynamic Braking Effort : 179 kN

Fuel capacity :
 2202-2210 7273 litres
 All others 5950 litres
 Sand capacity : 0.68 cubic metres
 Lube Oil capacity : 918 litres
 Cooling Water capacity : 795 litres



Sources : DEM256, Operators Manual, Load Table GMR-350-29, K.McDonald Diagram (Fuel tank configuration as per 2202-2210)